PROGRAMS

INDUSTRIAL SYSTEMS TECHNOLOGY

The Industrial Systems Technology curriculum is designed to prepare or upgrade individuals to safely service, maintain, repair, or install equipment. Instruction includes theory and skill training needed for inspecting, testing, troubleshooting, and diagnosing industrial systems.

Students will learn multi-craft technical skills in print reading, mechanical systems maintenance, electricity, hydraulics/pneumatics, welding, machining or fabrication, and includes various diagnostic and repair procedures. Practical application in these industrial systems will be emphasized and additional advanced course work may be offered.

Upon completion of this curriculum, graduates should be able to individually, or with a team, safely install, inspect, diagnose, repair, and maintain industrial process and support equipment. Students will also be encouraged to develop their skills as life-long learners.

Associate (A50240)

Spring Semester 1

		Lec	Lab	Clinic	Credit
ACA-115	Success & Study Skills	0	2	0	1
BPR-135	Schematics & Diagrams	2	0	0	2
ELC-112	DC/AC Electricity	3	6	0	5
ELC-128	Introduction to Programmable Logic Controller	2	3	0	3
ISC-112	Industrial Safety	2	0	0	2
PCI-162	Instrumentation Controls	2	3	0	3
				Total:	**16**

Summer Semester 1

		Lec	Lab	Clinic	Credit
Math Option	Mathematics Options Listed Below	2-3	0-2	0	3-4
Communications Option	Communications Options Listed Below	3	0	0	3
				Total:	**6-7**

Fall Semester 1

		Lec	Lab	Clinic	Credit
ELC-130	Advanced Motors and Controls	2	2	0	3
HYD-110	Hydraulics/Pneumatics I	2	3	0	3
MEC-111	Machine Processes I	1	4	0	3
MNT-110	Introduction to Maintenance Procedures	1	3	0	2
MNT-165	Mechanical Industrial Systems	1	3	0	2
WLD-112	Basic Welding Processes	1	3	0	2
English Options	English Options Listed Below	3	0	0	3
				Total:	**18**

Spring Semester 2		Lec	Lab	Clinic	Credit
ATR-215	Sensors and Transducers	2	3	0	3
ATR-280	Robotic Fundamentals	3	2	0	4
HYD-210	Advanced Hydraulics	1	3	0	2
MNT-220	Rigging and Moving	1	3	0	2
Social & Behavioral Option	Social & Behavioral Science Options Listed Below	3	0	0	3
				Total:	**14**

Fall Semester 2		Lec	Lab	Clinic	Credit
ELC-215	Electrical Maintenance	2	3	0	3
ELN-275	Troubleshooting	1	3	0	2
MNT-240	Indust Equip Troubleshoot	1	3	0	2
MNT-263	Electrical-Pneumatic Components	2	4	0	4
Humanities Option	Humanities and Fine Arts Options Listed Below	3	0	0	3
				Total:	**14**

Total Credit Hours: 68

English: Choose One of the following courses:		Lec	Lab	Clinic	Credit
ENG-110	Freshman Composition	3	0	0	3
ENG-111	Writing and Inquiry	3	0	0	3

Communications: Choose One of the following:		Lec	Lab	Clinic	Credit
COM-120	Intro to Interpersonal Communication	3	0	0	3
COM-231	Public Speaking	3	0	0	3
ENG-112	Writing and Research in the Disciplines	3	0	0	3

Mathematics: Choose at least 3 hours from the following courses:		Lec	Lab	Clinic	Credit
MAT-110	Mathematical Measurement and Literacy	2	2	0	3
MAT-143	Quantitative Literacy	2	2	0	3

Social and Behavioral Sciences Choices for AAS Degree Programs Unless Otherwise Noted:		Lec	Lab	Clinic	Credit
ECO-251	Principles of Microeconomics	3	0	0	3
ECO-252	Principles of Macroeconomics	3	0	0	3
POL-120	American Government	3	0	0	3
PSY-150	General Psychology	3	0	0	3
SOC-210	Introduction to Sociology	3	0	0	3

Humanities/Fine Arts Choices for AAS Degree Programs Unless Otherwise Noted:		Lec	Lab	Clinic	Credit
ART-111	Art Appreciation	3	0	0	3

Humanities/Fine Arts Choices for AAS Degree Programs Unless Otherwise Noted:		Lec	Lab	Clinic	Credit
HUM-110	Technology and Society	3	0	0	3
HUM-115	Critical Thinking	3	0	0	3
MUS-110	Music Appreciation	3	0	0	3

Diploma (D50240)

Spring Semester 1		Lec	Lab	Clinic	Credit
ACA-115	Success & Study Skills	0	2	0	1
BPR-135	Schematics & Diagrams	2	0	0	2
ELC-112	DC/AC Electricity	3	6	0	5
ELC-128	Introduction to Programmable Logic Controller	2	3	0	3
ISC-112	Industrial Safety	2	0	0	2
PCI-162	Instrumentation Controls	2	3	0	3
				Total:	**16**

Summer Semester 1		Lec	Lab	Clinic	Credit
Math Option	Mathematics Options Listed Below	2	2	0	3
				Total:	**3**

Fall Semester 1		Lec	Lab	Clinic	Credit
Communication Option	Communication Options Listed Below	3	0	0	3
ELC-130	Advanced Motors and Controls	2	2	0	3
HYD-110	Hydraulics/Pneumatics I	2	3	0	3
MEC-111	Machine Processes I	1	4	0	3
MNT-110	Introduction to Maintenance Procedures	1	3	0	2
MNT-165	Mechanical Industrial Systems	1	3	0	2
WLD-112	Basic Welding Processes	1	3	0	2
				Total:	**18**

Total Credit Hours: 37

Communications: Choose One of the following:		Lec	Lab	Clinic	Credit
COM-120	Intro to Interpersonal Communication	3	0	0	3
COM-231	Public Speaking	3	0	0	3
ENG-110	Freshman Composition	3	0	0	3
ENG-111	Writing and Inquiry	3	0	0	3

Mathematics: Choose at least 3 hours from the following courses:		Lec	Lab	Clinic	Credit
MAT-110	Mathematical Measurement and Literacy	2	2	0	3
MAT-143	Quantitative Literacy	2	2	0	3

Certificate (C50240)

Spring Semester 1

		Lec	Lab	Clinic	Credit
BPR-135	Schematics & Diagrams	2	0	0	2
ELC-112	DC/AC Electricity	3	6	0	5
ELC-128	Introduction to Programmable Logic Controller	2	3	0	3
ISC-112	Industrial Safety	2	0	0	2
PCI-162	Instrumentation Controls	2	3	0	3
				Total:	**15**

Total Credit Hours: 15